Figure 1: Example transmission of data over a communications network

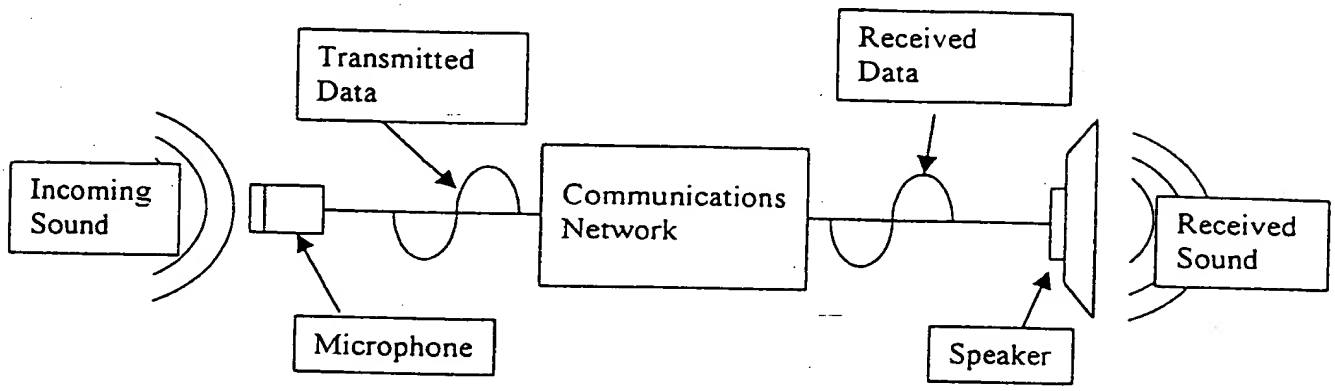


Figure 2: Creation of a digital signal from an analog signal

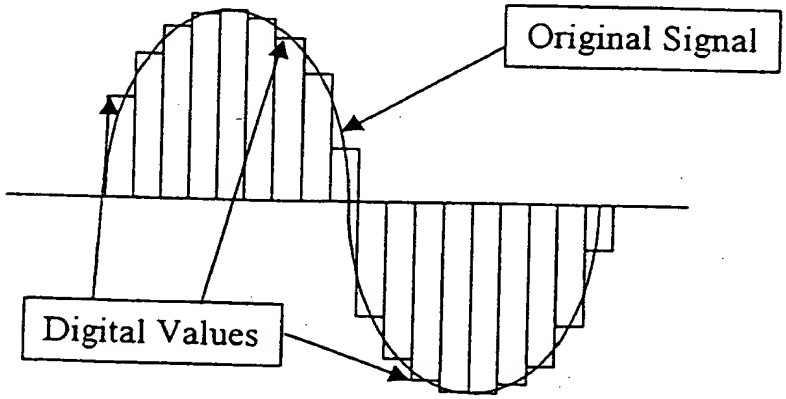


Figure 3: Illustration of the difference between bits, packets and frames.

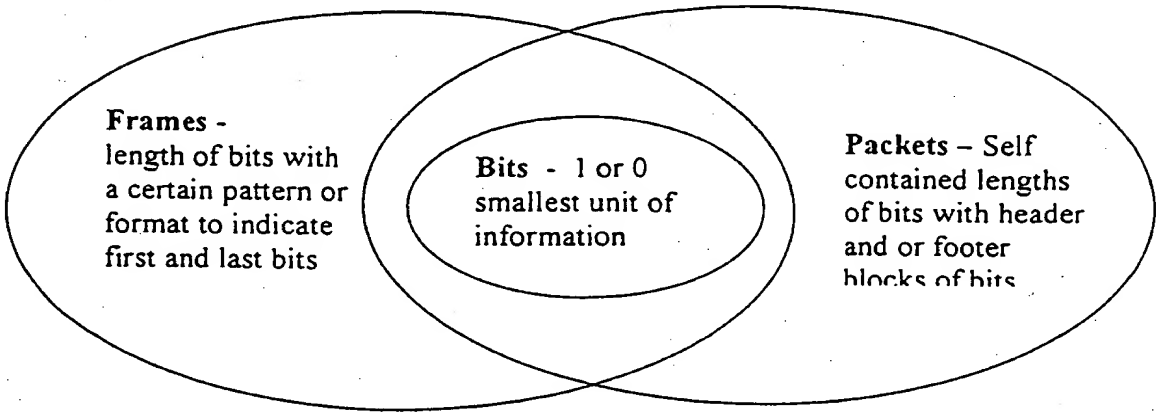
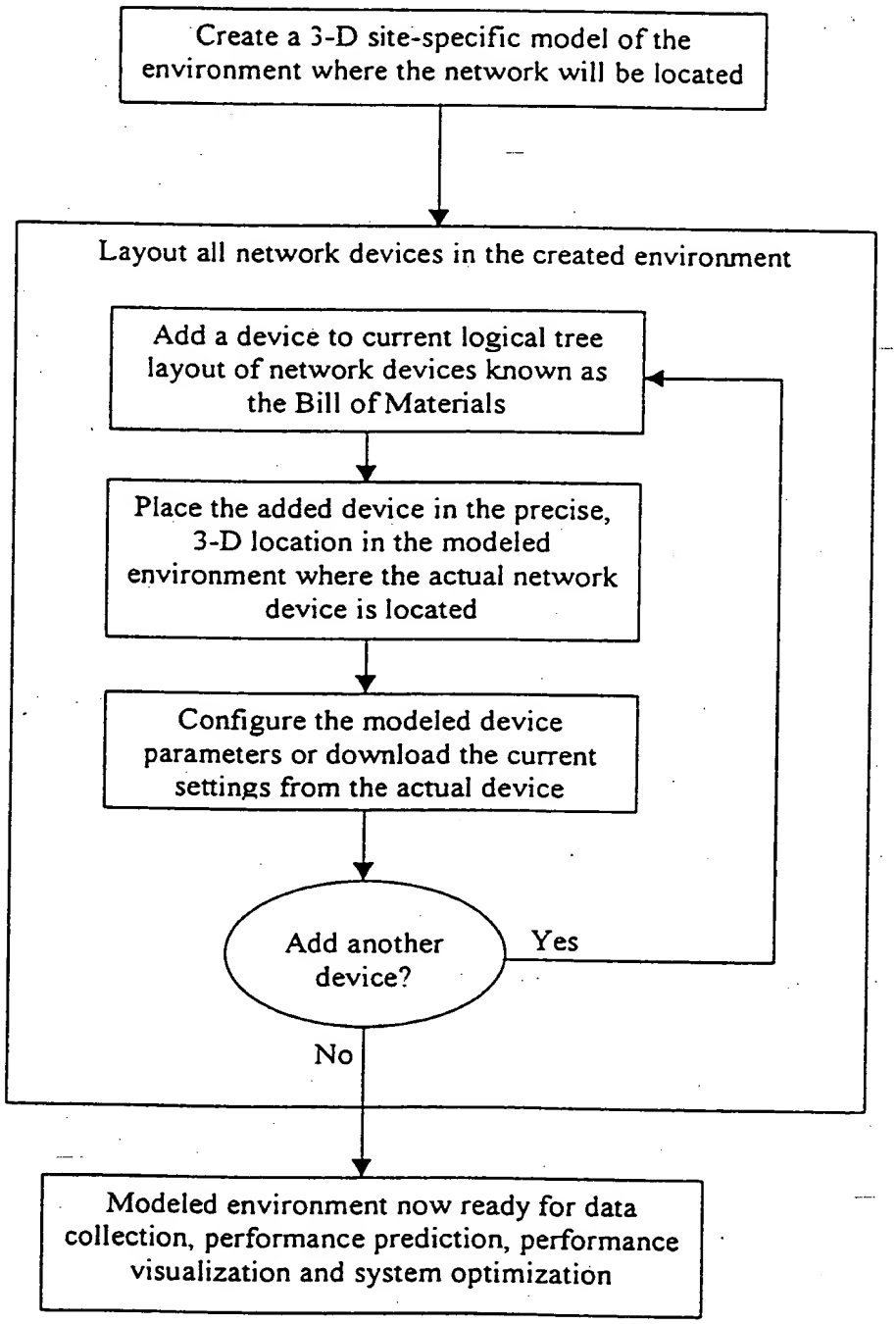


Figure 4: Illustration of the data displayed in each node of the Tree View of a data communications network.

- Name and type of network device
  - Specifications
    - Electrical, Optical, and Electromagnetic specific operating parameters
    - Software, Firmware and Hardware version numbers and settings
  - Physical connectors
    - Specifications and setting specific to each connector

Figure 5: Method for creating a 3-D site specific model of the environment



Title of the Invention: System and Method for Design, Tracking, Measurement, Prediction and Optimization of Data Communication Networks
Inventor's Name: Rappaport et al.
Docket No./Application No.: 09/668,145

Figure 6: Method for optimizing a data communications network using predictions

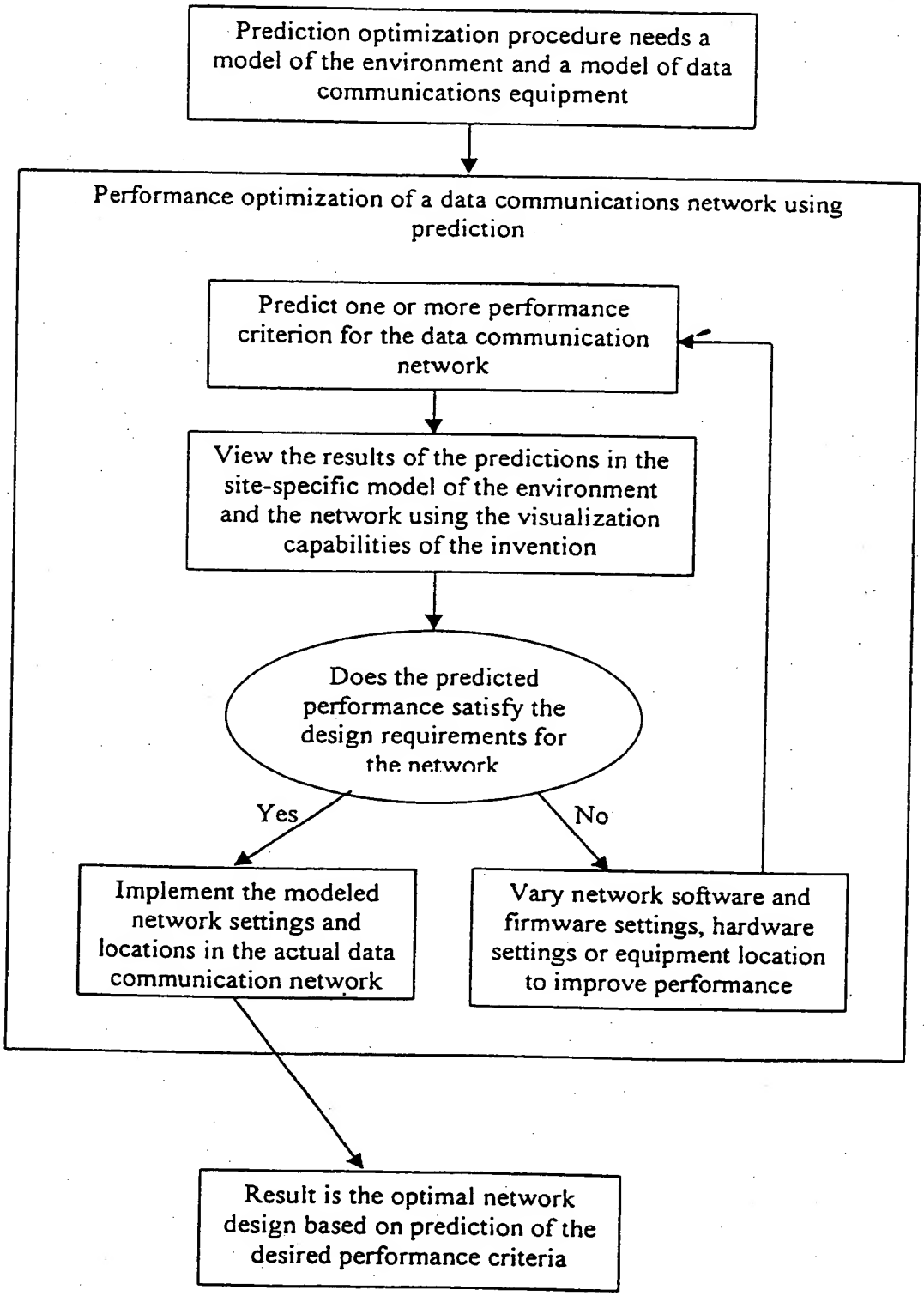


Figure 7: Method for optimizing a data communications network using measurements

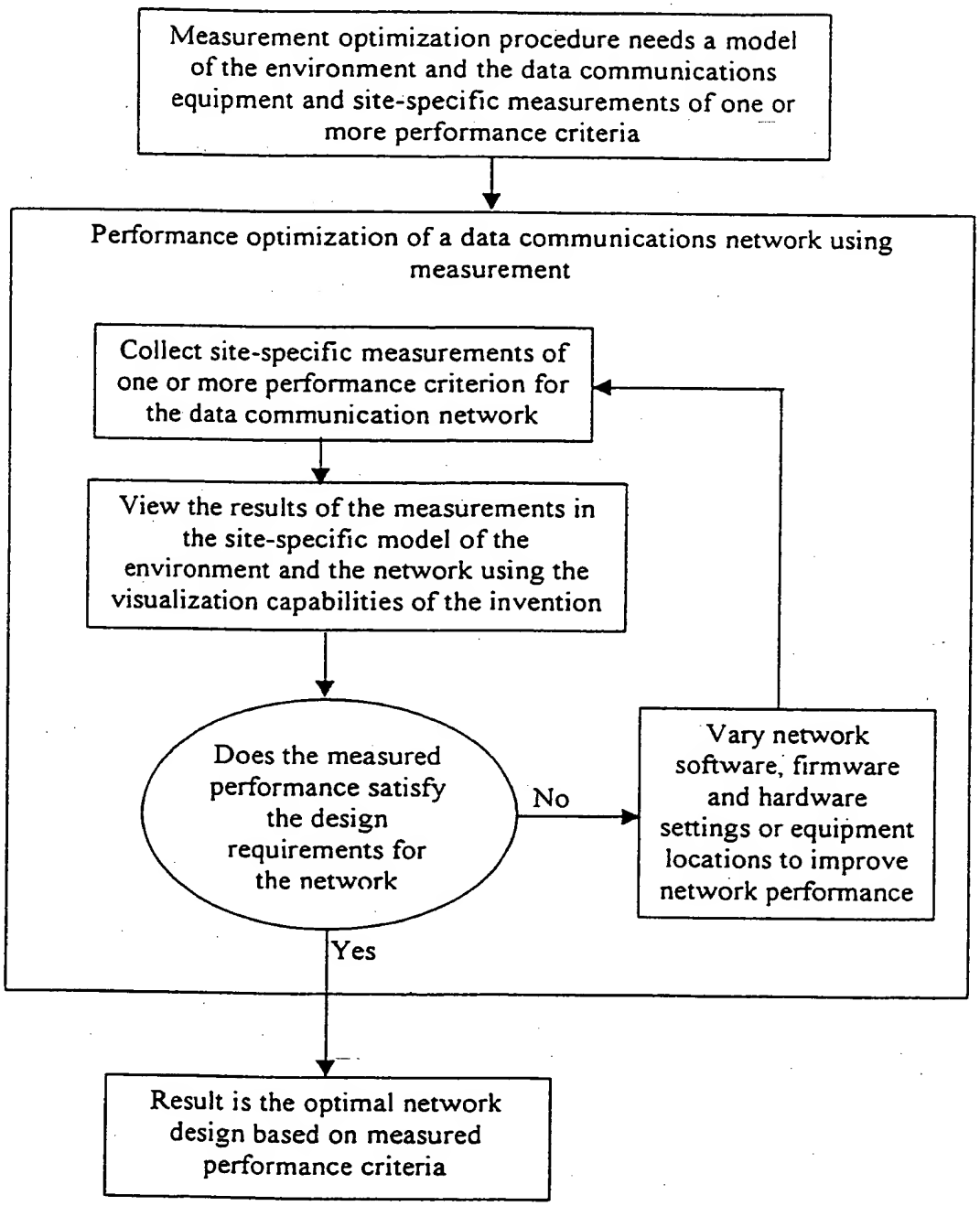


Figure8: Method for optimizing a data communications network using predictions and measurements.